

[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2018-0962; Product Identifier 2018-NM-125-AD; Amendment 39-

19560; AD 2019-03-08]

RIN 2120-AA64

Airworthiness Directives; Airbus SAS Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for all Airbus SAS Model A350-941 airplanes. This AD was prompted by reports of an overheat failure mode of the hydraulic engine-driven pump (EDP), and a determination that the affected EDP needs to be replaced with an improved EDP. This AD requires replacement of a certain EDP with an improved EDP. We are issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Airbus SAS, Airworthiness Office – EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email continued-airworthiness.a350@airbus.com; Internet http://www.airbus.com. You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195. It is also available on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0962.

Examining the AD Docket

You may examine the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0962; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Kathleen Arrigotti, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to all Airbus SAS Model A350-941 airplanes. The NPRM published in the <u>Federal Register</u> on November 23, 2018 (83 FR 59328). The NPRM was prompted by reports of an overheat failure mode of the hydraulic EDP, and a determination that the affected EDP needs to be replaced with an improved EDP. The NPRM proposed to require replacement of a certain EDP with an improved EDP.

We are issuing this AD to address the overheat failure mode of the hydraulic EDP, which may cause a fast temperature rise of the hydraulic fluid, and, if combined with an inoperative fuel tank inerting system, could lead to an uncontrolled overheat of the hydraulic fluid, possibly resulting in ignition of the fuel-air mixture of the affected fuel tank.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Union, has issued EASA AD 2018-0178, dated August 23, 2018 (referred to after this as the Mandatory Continuing Airworthiness Information, or "the MCAI"), to correct an unsafe condition for all Airbus SAS Model A350-941 airplanes. The MCAI states:

In the Airbus A350 design, the hydraulic fluid cooling system is located in the fuel tanks. Recently, an overheat failure mode of the hydraulic EDP was found, which may cause a fast temperature rise of the hydraulic fluid.

This condition, if not detected and corrected, combined with an inoperative fuel tank inerting system, could lead to an uncontrolled overheat of the hydraulic fluid, possibly resulting in ignition of the fuel-air mixture in the affected fuel tank.

To address this potential unsafe condition, Airbus issued a Major Event Revision (MER) of the A350 Master Minimum Equipment List (MMEL) that incorporates restrictions to avoid an uncontrolled overheat of the hydraulic system. Consequently, EASA issued Emergency AD 2017-0154-E to require implementation of these dispatch restrictions.

After EASA AD 2017-0154-E was issued, following further investigation, Airbus issued another MER of the A350 MMEL that expanded the number of restricted MMEL items. At the same time, Airbus revised Flight Operation Transmission (FOT) 999.0068/17, to inform all operators accordingly. Consequently, EASA issued AD 2017-0180, retaining the requirements of EASA Emergency AD 2017-0154-E, which was superseded, and requiring implementation of the new Airbus A350 MMEL MER and, consequently, restrictions for aeroplane dispatch.

After EASA AD 2017-0180 was issued, Airbus developed HMCA [Hydraulic Monitoring and Control Application] SW [software] S4.2, embodied in production through Airbus mod 112090, and introduced in service through Airbus SB [service bulletin] A350-29-P012. Consequently, EASA issued AD 2017-0200 [which corresponds to FAA AD 2018-19-19, Amendment 39-19419 (83 FR 48203, September 24, 2018)], retaining the requirements of EASA AD 2017-0180, which was superseded, and requiring modification of the aeroplane by installing HMCA SW S4.2.

Since EASA AD 2017-0200 was issued, it was determined that the affected part need to be replaced with improved EDP. Consequently, Airbus issued the SB [Service Bulletin A350-29-P013, dated March 12, 2018] to provide instructions to replace the affected parts with improved EDP, having P/N [part number] 53098-06, which are embodied in production through Airbus mod 112192.

For the reasons described above, this [EASA] AD retains the requirement of EASA AD 2017-0200, which is superseded, and requires replacement of each affected parts with improved EDP.

You may examine the MCAI in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0962.

Comments

We gave the public the opportunity to participate in developing this final rule. We have considered the comment received. Air Line Pilots Association, International stated that it supports the NPRM.

Conclusion

We reviewed the relevant data, considered the comment received, and determined that air safety and the public interest require adopting this final rule as proposed, except for minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

Related Service Information under 1 CFR part 51

Airbus has issued Service Bulletin A350-29-P013, dated March 12, 2018. This service information describes procedures for replacing a certain EDP with an improved EDP.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 11 airplanes of U.S. registry. We estimate the following costs to comply with this AD:

Estimated costs for required actions

Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Up to 25 work-hours X \$85 per hour = \$2,125	Up to \$224,400	Up to \$226,525	Up to \$2,491,775

According to the manufacturer, some or all of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. We do not control warranty coverage for affected individuals. As a result, we have included all known costs in our cost estimate.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII,
Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress
charges the FAA with promoting safe flight of civil aircraft in air commerce by
prescribing regulations for practices, methods, and procedures the Administrator finds
necessary for safety in air commerce. This regulation is within the scope of that authority
because it addresses an unsafe condition that is likely to exist or develop on products
identified in this rulemaking action.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to transport category airplanes and associated appliances to the Director of the System Oversight Division.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a "significant regulatory action" under Executive Order 12866,
- (2) Is not a "significant rule" under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
 - (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2019-03-08 Airbus SAS: Amendment 39-19560; Docket No. FAA-2018-0962; Product Identifier 2018-NM-125-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Airbus SAS Model A350-941 airplanes, certificated in any category, all serial numbers.

(d) Subject

Air Transport Association (ATA) of America Code 29, Hydraulic power.

(e) Reason

This AD was prompted by reports of an overheat failure mode of the hydraulic engine-driven pump (EDP), and a determination that the affected EDP needs to be replaced with an improved EDP. We are issuing this AD to address the overheat failure mode of the hydraulic EDP, which may cause a fast temperature rise of the hydraulic

fluid, and, if combined with an inoperative fuel tank inerting system, could lead to an uncontrolled overheat of the hydraulic fluid, possibly resulting in ignition of the fuel-air mixture of the affected fuel tank.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Action

Before February 6, 2020, replace each EDP having part number (P/N) 53098-04 with an improved EDP, having P/N 53098-06, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A350-29-P013, dated March 12, 2018.

(h) Parts Installation Prohibition

At the applicable time specified in paragraph (h)(1) or (h)(2) of this AD: No person may install an EDP having P/N 53098-04 on any airplane.

- (1) For airplanes that, as of the effective date of this AD, have any EDP having P/N 53098-04 installed: After modification of the airplane as specified by paragraph (g) of this AD.
- (2) For airplanes that, as of the effective date of this AD, are post-Modification 112192 and do not have any EDP having P/N 53098-04 installed: As of the effective date of this AD.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Section, Transport Standards Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14

CFR 39.19, send your request to your principal inspector or local Flight Standards

District Office, as appropriate. If sending information directly to the International

Section, send it to the attention of the person identified in paragraph (j)(2) of this AD.

Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

- (2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Section, Transport Standards Branch, FAA; or the European Aviation Safety Agency (EASA); or Airbus SAS's EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.
- (3) Required for Compliance (RC): If any service information contains procedures or tests that are identified as RC, those procedures and tests must be done to comply with this AD; any procedures or tests that are not identified as RC are recommended. Those procedures and tests that are not identified as RC may be deviated from using accepted methods in accordance with the operator's maintenance or inspection program without obtaining approval of an AMOC, provided the procedures and tests identified as RC can be done and the airplane can be put back in an airworthy condition. Any substitutions or changes to procedures or tests identified as RC require approval of an AMOC.

(j) Related Information

- (1) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA AD 2018-0178, dated August 23, 2018, for related information. This MCAI may be found in the AD docket on the Internet at http://www.regulations.gov by searching for and locating Docket No. FAA-2018-0962.
- (2) For more information about this AD, contact Kathleen Arrigotti, Aerospace Engineer, International Section, Transport Standards Branch, FAA, 2200 South 216th St., Des Moines, WA 98198; telephone and fax 206-231-3218.

(k) Material Incorporated by Reference

- (1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.
- (2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.
 - (i) Airbus Service Bulletin A350-29-P013, dated March 12, 2018.
 - (ii) [Reserved]
- (3) For service information identified in this AD, contact Airbus SAS,

 Airworthiness Office EAL, Rond-Point Emile Dewoitine No: 2, 31700 Blagnac Cedex,

 France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; email continuedairworthiness.a350@airbus.com; Internet http://www.airbus.com.
- (4) You may view this service information at the FAA, Transport Standards Branch, 2200 South 216th St., Des Moines, WA. For information on the availability of this material at the FAA, call 206-231-3195.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued in Des Moines, Washington, on February 8, 2019.

Michael Kaszycki, Acting Director, System Oversight Division, Aircraft Certification Service.

[FR Doc. 2019-03125 Filed: 2/25/2019 8:45 am; Publication Date: 2/26/2019]